```
C:\Program Files\Stnexp\Queries\10623640.str
chain nodes :
   1 10 11
             12 13 14 15 16 17 19
ring nodes : 3 4 5
              7
chain bonds:
   1-3 1-12 5-11 8-10 12-19 13-14 13-15 13-17 16-19
ring bonds :
```

```
3-4 3-8 4-5 5-6 6-7 7-8
exact/norm bonds :
    1-3 1-12 3-4 3-8 4-5 5-6 5-11 6-7 7-8 8-10 12-19 13-14 13-15 13-17 16-19
G1:C,N
G2:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,OH,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO,CHO,[*1]
Match level:
             3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 10:CLASS 11:CLASS 12:Atom
    1:CLASS
    13:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:Atom
Generic attributes :
    12:
    Saturation
                           : Unsaturated
    Number of Carbon Atoms : less than 7
    Type of Ring System
                           : Monocyclic
    19:
    Saturation
                           : Unsaturated
   Number of Carbon Atoms : less than 7
Type of Ring System : Monocyclic
```

\* \* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* SESSION RESUMED IN FILE 'CAOLD' AT 16:58:36 ON 16 JUN 2004 FILE 'CAOLD' ENTERED AT 16:58:36 ON 16 JUN 2004 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS) COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.84 183.39 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -2.08 => file req COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.84 183.39 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -2.08

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 JUN 2004 HIGHEST RN 693773-36-3 DICTIONARY FILE UPDATES: 15 JUN 2004 HIGHEST RN 693773-36-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

### => d his

(FILE 'HOME' ENTERED AT 16:50:31 ON 16 JUN 2004)

FILE 'REGISTRY' ENTERED AT 16:50:39 ON 16 JUN 2004
L1 STRUCTURE UPLOADED
L2 1 S 2,5-PIPERAZINEDIONE/CN
L3 0 S 46.383
L4 524029 S 46.383/RID
L5 0 S L1 SAMPLE SUB=L4
L6 131 S L1 FULL SUB=L4

FILE 'CAPLUS' ENTERED AT 16:54:06 ON 16 JUN 2004

FILE 'CAPLUS' ENTERED AT 16:54:30 ON 16 JUN 2004

L7

3 S L6

FILE 'CAOLD' ENTERED AT 16:55:25 ON 16 JUN 2004 L8

FILE 'REGISTRY' ENTERED AT 16:58:44 ON 16 JUN 2004

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 183.81 0.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -2.08

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FILE COVERS 1907 - 16 Jun 2004 VOL 140 ISS 25 FILE LAST UPDATED: 15 Jun 2004 (20040615/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 16:50:31 ON 16 JUN 2004)

FILE 'REGISTRY' ENTERED AT 16:50:39 ON 16 JUN 2004

L1STRUCTURE UPLOADED

L2 1 S 2,5-PIPERAZINEDIONE/CN

L3 0 S 46.383

T.4 524029 S 46.383/RID

 $L_5$ 0 S L1 SAMPLE SUB=L4

1.6 131 S L1 FULL SUB=L4

FILE 'CAPLUS' ENTERED AT 16:54:06 ON 16 JUN 2004

FILE 'CAPLUS' ENTERED AT 16:54:30 ON 16 JUN 2004

L7 3 S L6

FILE 'CAOLD' ENTERED AT 16:55:25 ON 16 JUN 2004 L80 S L6

FILE 'REGISTRY' ENTERED AT 16:58:44 ON 16 JUN 2004

FILE 'CAPLUS' ENTERED AT 16:58:59 ON 16 JUN 2004

=> s 16

L9 3 L6

=> d 17 1-3 bib abs

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:214115 CAPLUS

TI Small molecule biaryl FSH receptor agonists. Part 2: Lead optimization via parallel synthesis

AU Guo, Tao; Adang, Anton E. P.; Dong, Guizhen; Fitzpatrick, Dan; Geng, Peng; Ho, Koc-Kan; Jibilian, Charles H.; Kultgen, Steven G.; Liu, Ruiyan; McDonald, Edward; Saionz, Kurt W.; Valenzano, Kenneth J.; Van Straten, Nicole C. R.; Xie, Dan; Webb, Maria L.

CS Pharmacopeia, Inc., Princeton, NJ, 08543-5350, USA

SO Bioorganic & Medicinal Chemistry Letters (2004), 14(7), 1717-1720 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science B.V.

DT Journal

LA English

GΙ

Me 
$$(CH_2)_7$$

NMe

NMe

NMe

NMe

AB Potent small mol. biaryl diketopiperazine FSH receptor agonists such as I (EC50=13 nM) and II (EC50=1.2 nM) were discovered through the design, synthesis and evaluation of three biaryl diketopiperazine optimization

Ι

II

Page 3

libraries with over 300 compds. These libraries were prepared via solid-phase parallel synthesis using a cyclization-release method.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
L7
      2003:511150 CAPLUS
AN
      139:85377
DN
      Preparation of substituted diketopiperazines as oxytocin antagonists
ΤI
      Borthwick, Alan David; Hatley, Richard Jonathan; Hickey, Deirdre Mary
IN
      Bernadette; Liddle, John; Livermore, David George Hubert; Mason, Andrew
      Mcmurtrie; Miller, Neil Derek; Nerozzi, Fabrizio; Sollis, Steven Leslie;
      Szardenings, Anna Katrin; Wyatt, Paul Graham
      Glaxo Group Limited, UK; et al.
PΑ
      PCT Int. Appl., 90 pp.
SO
      CODEN: PIXXD2
      Patent
DT
      English
LA
FAN.CNT 1
                                                       APPLICATION NO. DATE
                        KIND DATE
      PATENT NO.
       _____
                            A1 20030703
      WO 2003053443
                                                      WO 2002-EP14823 20021220
PI
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
                 MD, RU, TJ, TM
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
                 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
                 NE, SN, TD, TG
PRAI GB 2001-30677
                            . A
                                     20011221
       MARPAT 139:85377
OS
GΙ
```

AB Diketopiperazines I [R1 = optionally hydroxylated alkyl, cycloalkyl, benzocycloalkyl; R2 = Alykl, alkoxyalkyl, alkylthioalkyl, dialkylaminoalkyl, cycloalkylalkyl, 5-6-membered heterocycle containing a single O, S, NMe, NEt; R3 = (un)substituted Ph, heteroaryl, bicyclic, heterobicyclic; R4 = OH, acyloxyalkoxy, (un)substituted NH2] were prepared for treating or preventing diseases or conditions mediated through the action of oxytocin (no data). Thus, the piperazinedione II was obtained by 4-component reaction of H-D-Leu-OMe.HCl, 4-FC6H4CHO, Me2CHNC, and N-tert.-butoxycarbonyl-D-indanylqlycine.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

II

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:695961 CAPLUS

DN 137:216961

TI Preparation of bisaryl derivatives having FSH receptor modulatory activity

IN Guo, Tao; Ho, Koc-Kan; McDonald, Edward; Dolle, Roland Ellwood; Saionz,
Kurt W.; Kultgen, Steven G.; Liu, Ruiyan; Dong, Guizhen; Geng, Peng;
Adang, Anton Egbert Peter; Van Straten, Nicole Corine Renee

PA Pharmacopeia, Inc., USA

SO PCT Int. Appl., 167 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
												<b>-</b> -					
WO 2002070493				A1 20020912				WO 2002-US3777						20020118			
	W:	ΑE,	AG,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
		US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM	
		WO 2002	WO 20020704 W: AE, CO, GM, LS, PT,	WO 2002070493 W: AE, AG, CO, CR, GM, HR, LS, LT, PT, RO,	WO 2002070493 A W: AE, AG, AL, CO, CR, CU, GM, HR, HU, LS, LT, LU, PT, RO, RU,	WO 2002070493 A1  W: AE, AG, AL, AM, CO, CR, CU, CZ, GM, HR, HU, ID, LS, LT, LU, LV, PT, RO, RU, SD,	WO 2002070493 A1 2002 W: AE, AG, AL, AM, AT, CO, CR, CU, CZ, DE, GM, HR, HU, ID, IL, LS, LT, LU, LV, MA, PT, RO, RU, SD, SE,	W: AE, AG, AL, AM, AT, AU, CO, CR, CU, CZ, DE, DK, GM, HR, HU, ID, IL, IN, LS, LT, LU, LV, MA, MD, PT, RO, RU, SD, SE, SG,	WO 2002070493 A1 20020912  W: AE, AG, AL, AM, AT, AU, AZ, CO, CR, CU, CZ, DE, DK, DM, GM, HR, HU, ID, IL, IN, IS, LS, LT, LU, LV, MA, MD, MG, PT, RO, RU, SD, SE, SG, SI,	WO 2002070493 A1 20020912 W0 W: AE, AG, AL, AM, AT, AU, AZ, BA, CO, CR, CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, JP, LS, LT, LU, LV, MA, MD, MG, MK, PT, RO, RU, SD, SE, SG, SI, SK,	WO 2002070493 A1 20020912 WO 200 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GM, HR, HU, ID, IL, IN, IS, JP, KE, LS, LT, LU, LV, MA, MD, MG, MK, MN, PT, RO, RU, SD, SE, SG, SI, SK, SL,	WO 2002070493 A1 20020912 WO 2002-US W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,	WO 2002070493 Al 20020912 WO 2002-US3777 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,	WO 2002070493 Al 20020912 WO 2002-US3777  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,	WO 2002070493 Al 20020912 WO 2002-US3777 20020 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,	WO 2002070493 Al 20020912 WO 2002-US3777 20020118  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,	

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1351941 Al 20031015 EP 2002-717403 20020118

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI EP 2001-200194 A 20010119
WO 2002-US3777 W 20020118

OS MARPAT 137:216961
GI

Ι

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{OMe} \\ \end{array}$$

AB Title compds. I [R,R = H/H, O, H/Me, H/OH, H/CN; A = pyridazindione, etc.; Ar = (un)substituted phenyl] were prepared For example, a photolabile-supported 1-hexylamine derivative was acylated with (3S)-1-carboxymethyl-3-(4-iodobenzyl)-4-methyl-2,5-dioxopiperazine (preparation given) followed by coupling of the resulting aryl iodide with 3,4,5-trimethoxybenzeneboronic acid (DME/EtOH, Pd2(dba)3, Ph3As, CsF). The resulting resin was irradiated at 365 nm at 50° (MeOH/TFA) to yield II. II had EC50 < 10 μM for the FSH receptor. I are useful in the treatment for the control of fertility, for contraception or for treatment of hormone-dependent disorders.

II

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 17 2 hitstr

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

IT 554447-22-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

Absolute stereochemistry.

=> file caold COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 10.71 194.52 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -2.08 -4.16

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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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=> s 16 L10 0 L6

=>